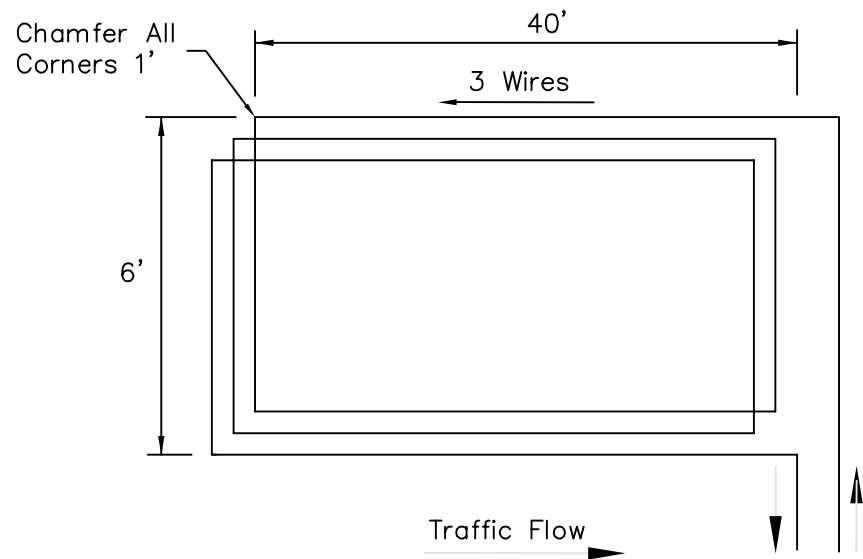


**QUADRUPOLE LOOP DETECTOR
For Left Turn Lanes Only**



STANDARD LOOP DETECTOR

NOTES:

1. All loop detectors shall be wire-in-duct type wire. (Detect-a-Duct or approved equivalent, #14 stranded inside a 1/4" PVC tubing (IMSA 51-5).
2. All loop detectors shall be centered in the middle of the applicable traffic lane. Loop shall be sufficiently dimensioned on the plans. Loop detectors shall extend five feet into the crosswalk unless directed otherwise by the Traffic Engineering Department.
3. A rectangular loop with 3 turns (6 feet x 40 feet) shall be used for all through lanes.
4. A quadrupole loop with 2 outside turns and 4 inside turns (6 feet x 40 feet) shall be used in all exclusive left-turn lanes. (Wire in middle cut shall run the same direction).
5. Loop detectors shall not be installed in exclusive right turn lanes.
6. The location of permanent count detector loops shall be specified by the Traffic Engineering Department. Count detector loops shall consist of a minimum of 4 turns (6 feet x 6 feet).

7. Pre-formed loop detectors conforming to the latest ADOT specifications shall be used under decorative pavement, "pavers", concrete, or other "special" roadway surfaces, or as directed by the Traffic Engineering Department.
8. Lead-in cable between loop wire and controller shall be latest ADOT specification or approved equivalent (IMSA 50-2).
9. Loop lead-in and splices in pull box shall be twisted and soldered. Griggs Loop Detector Sealant, 3-M Loop Sealant, or approved equivalent shall be used.
10. Loops shall be installed prior to the installation of the final pavement lift (if part of a paving project).
11. Loops shall be inspected and tested prior to acceptance by the City.
12. See ADOT TS 7-1 for installation details.

DETAIL NO. **2137** **City of Scottsdale**
Standard Details

LOOP DETECTORS

DETAIL NO. **2137**